

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of transmitting and receiving messages in a network, comprising:

transmitting a flow control message header to a transmitting node from a receiving node, wherein the flow control header comprises a message sent field and a message limit field;

transmitting a message from the transmitting node to the receiving node and incrementing a send counter;

receiving the message by the receiving node and incrementing a consumed credits variable;

determining whether a message was dropped when the message sent field is greater less than ~~or equal~~ to the value of the consumed credits variable;

adjusting the message limit field to compensate for the dropped message; and

transmitting the message limit field to the transmitting node.

2. (Currently Amended) The method recited in claim 1, wherein the determining whether a message was dropped further comprises:

setting a variable drop count equal to the message sent field less the consumed credits variable;

determining if the variable drop count is less than an available credits variable, wherein the available credits variable represents the total amount of space allocated to receive messages from a particular node; and

increasing the message limit field value and transmitting the flow control message header to the transmitting node.

3. (Original) The method recited in claim 2, further comprising:
setting a new credits variable equal to the available credits variable plus the new credits;
and
setting the available credits variable to zero.
4. (Original) The method recited in claim 3, further comprising:
setting a send limit variable equal to the message limit field; and
executing a threshold module.
5. (Original) The method recited in claim 4, wherein the threshold module further comprising:
determining if the available credits variable is less than a credit threshold variable; and
transmitting the flow control message header to the transmitting node.
6. (Original) The method recited in claim 1, further comprising:
transmitting at a predetermined time interval the flow control message header to the transmitting node, wherein a value contained in the message limit field is increased.
7. (Currently Amended) The method recited in claim 6, wherein the increase in the message limit field further comprises:
incrementing send counter and the message sent field;
incrementing an ~~[[and]]~~ available credits variable by a new credits variable, wherein the available credits variable represents the total number of messages the transmitting node may send and the new credits variable represents additional messages that may be transmitted by the transmitting node; and
setting the message limit field equal to the consumed credits variable plus the available credits variable.

8. (Original) The method recited in claim 1, further comprising:

determining if a get credit variable is set to true, wherein the get credit variable represents that additional messages may be sent by the transmitting node to the receiving node; and
incrementing the available credits variable by the number of additional messages permitted.

9. (Currently Amended) An apparatus comprising a data storage medium for storing instructions when executed by a processor results in the apparatus performing a series of operations, comprising:

transmitting a flow control message header to a transmitting node from a receiving node, wherein the flow control header comprises a message sent field and a message limit field;

transmitting a message from the transmitting node to the receiving node and incrementing a send counter;

receiving the message by the receiving node and incrementing a consumed credits variable;

determining a message was dropped when the message sent field is less than or equal to the value of the consumed credits variable;

adjusting the message limit field to compensate for the dropped message; and

transmitting the message limit field to the transmitting node.

10. (Original) The apparatus recited in claim 9, wherein the determining a message was dropped further comprises:

setting a variable drop count equal to the message sent field less the consumed credits variable;

determining if the variable drop count is less than an available credits variable, wherein the available credits variable represents the total amount of space allocated to receive messages from a particular node; and

increasing the message limit field value and transmitting the flow control message header to the transmitting node.

11. (Original) The apparatus recited in claim 10, further comprising:
 setting a new credits variable equal to the available credits variable plus the new credits variable; and
 setting the available credits variable to zero.
12. (Original) The apparatus recited in claim 11, further comprising:
 setting a send limit variable equal to the message limit field; and
 executing a threshold module.
13. (Original) The apparatus recited in claim 12, wherein the threshold module further comprising:
 determining if the available credits variable is less than a credit threshold variable; and
 transmitting the flow control message header to the transmitting node.
14. (Original) The apparatus recited in claim 9, further comprising:
 transmitting at a predetermined time interval the flow control message header to the transmitting node, wherein a value contained in the message limit field is increased.
15. (Currently Amended) The apparatus recited in claim 14, wherein the increase in the message limit field further comprises:
 incrementing send counter and the message sent field;
 incrementing an ~~an~~ ~~and~~ available credits variable by a new credits variable, wherein the available credits variable represents the total number of messages the transmitting node may send and the new credits variable represents additional messages that may be transmitted by the transmitting node; and
 setting the message limit field equal to the consumed credits variable plus the available credits variable.

16. (Original) The apparatus recited in claim 9, further comprising:

determining if a get credit variable is set to true, where in the get credit variable represents that additional messages may be sent by the transmitting node to the receiving node; and

incrementing the available credits variable by the number of additional messages permitted.

17. (Currently Amended) A system for transmitting and receiving messages in a network, comprising:

a receive done module to determine that all messages ~~message~~ transmitted have been received based upon a flow control header, wherein the flow control header comprises a message sent field and a message limit field; and

a post send module to update an available credits variable, wherein the available credits variable indicates the total number of messages a transmitting node may send to a receiving node.

18. (Original) The system recited in claim 17, wherein the receive done module increments a consumed credits variable and compares the consumed credits variable to the message sent field to determine if a message has been dropped.

19. (Original) The system recited in claim 18, wherein the receive done module will add an additional value to the message limit field when it is determined that a message has been dropped.

20. (Currently Amended) The system recited in claim 19, further comprising:

a threshold check module to determine if the transmitting node has any available credits remaining and updating the message limit field to include additional credits when no further credits ~~remaining~~ remain for the transmitting node.

21. (Original) The system recited in claim 19, further comprising:

a post receive module to increment a new credit variable and process pending message requests.

22. (Original) The system recited in claim 19 , further comprising:

a periodic update module to determine at a predetermined time interval if a transmitting node has run out of credits used to transmit messages with.